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CLINICAL LECTURES.

AGE OF FETUS — CHANGES IN COLOR OF NEW-BORN.—CARE OF THE BREASTS IN PREG- NANCY.—PUERPERAL SEPTICEMIA.¹

BY THEOPHILIS PARVIN, M. D.,

PROFESSOR OF OBSTETRICS AND OF THE DISEASES
OF WOMEN AND CHILDREN IN THE JEFFERSON
MEDICAL COLLEGE, PHILADELPHIA.

Age of Fetus.

Gentlemen: A woman was delivered re-
cently at the Maternity of a dead fetus,
which is now presented to you. You ob-
serve that it is macerated, and therefore had
been dead some days. An interesting ques-
tion relating to the fetus expelled dead or
living is: Can we determine, at least ap-
proximately, how far development had ad-

vanced, or, in other words, what was the age
of the fetus? The following table from
Auvard I believe will be useful to you in
deciding this question:

- About the middle of the fourth month the
fetus is 20 centimeters long.
- About the middle of the fifth month the
fetus is 25 centimeters long.
- About the middle of the sixth month the
fetus is 30 centimeters long.
- About the middle of the seventh month
the fetus is 35 centimeters long.
- About the middle of the eighth month
the fetus is 40 centimeters long.
- About the middle of the ninth month the
fetus is 45 centimeters long.
- And at the end of nine months, 50 centi-
meters long.

Changes in Color of the New-Born.

The two infants, each about a week old,
presented for examination, some of you
correctly state are affected with jaundice, a
condition so common and so free from

¹ Delivered at the Philadelphia Hospital.

danger, that it is known as physiological jaundice. The discoloration of the skin usually comes two or three days after birth, and in eight or ten days fades away, without having, in the meantime, caused the child any discomfort. Various explanations have been given of this condition: One of these is that it results from slight hepatitis, while Frerichs attributes it to the lessened supply of blood passing to the liver, immediately after the cord is tied, and hence a relative anemia of the hepatic capillaries; and this deficiency is compensated by the passage of bile from liver cells into the capillaries. Another hypothesis is that blood exuding into the skin is freed of its coloring matter, and this hypothesis is strengthened by the fact that the coloring matter of bile is not found in the urine of these infants. New-born babes usually pass through certain changes of color. The skin after the detachment of the vernix caseosa is quite red, and becomes deeper in hue as desquamation goes on. Then in two-thirds or three-fourths of all cases the physiological jaundice referred to appears. After the completion of desquamation and the passing away of the jaundice the skin has its pinkish white or flesh color.

Care of the Breasts in Pregnancy.

You know that the mammiſeræ compose one of the great classes of the animal world, including some three thousand species, and foremost in this class is man. The word *mamma*—Greek, Latin and English—which the child first utters—was primarily applied to the breast. More than one of the old Roman writers refers to the infant calling *matrem mammam* as it did *patrem tatam*, a term which is said to survive in the word dad or daddy applied sometimes nowadays to the father. *Mamma* and *dada* are the first, or among the first, words uttered by the child. There seems to be a fitness in the secondary use of the word “mamma” as expressing an affection, probably purely animal in its origin, for her who supplies the infant with the nourishment, from her breasts, which it needs—the name of the source of food given to the person who has that source.

You know that woman is uniparous, and it is only exceptionally that she gives birth to more than one child at a time. And, according to the general law prevailing among all animals usually producing but one offspring at a birth, woman has one pair of

breasts. Fortunately for woman's comfort and convenience these organs are placed upon the anterior portion of the thorax, and not, as in some other of the mammiſeræ upon the abdomen, in the flanks, or upon the back. Her breasts are rarely symmetrical, the right being usually somewhat larger than the left, the opposite being the case probably in left-handed women. You know that each breast is composed of lobes, these of lobules, and the lobules of acini; that excretory ducts corresponding in number with that of the lobes, carry the milk to the summit of the nipple, there opening, and that before passing up in straight tubes in the nipple, they present large expansions called milk-sinuses. When these sinuses are enlarged, distended with milk, they are popularly known as “milk cords.” Each canal is surrounded by connective tissue, rich in elastic fibres, which become increased five or six times during lactation. But beside this, these canals have, external to the connective tissue, abundant muscular fasciculi, some longitudinal, others horizontal, and others oblique. The horizontal fibres are the most numerous, and by their contraction cause the nipple to project, and in some cases the compression of the sinuses is so strong that just when the mother is about to give the nipple to the infant milk may be forced in a stream some inches in length. As the horizontal muscular fibres by their action cause a projection, so the longitudinal fibres similarly acting, cause a retraction of the nipple; and probably most of the cases of retracted nipple are to be attributed not to abnormal shortness of the milk-ducts so much as to the predominance of the action of the longitudinal muscular fasciculi, a view which has some confirmation in the fact that often by perseveringly “drawing out” the nipple it can be given good shape, the resistance of these fibres being thus overcome.

In the three women whose breasts you now have an opportunity of examining, you will observe that these organs are apparently well-formed, even presenting somewhat larger size than usual. But the mere size of the breast is no proof that a woman will furnish an ample supply of milk; for the glandular structure may be deficient, the great mass of the breast being formed of fat. Generally a somewhat conical breast, and not a very large one promises better, so far as lactation is concerned. There is a mere promise of milk than the size or form of the

breasts. I during prep the time for of you know drive the c ing-yard. no richer “ in the su of the swe of the mil swollen udc would be re had been o a pregnant ways wet f stained with for the incu during her supply of n other sign readily avai in the urine lactosuria nure.

The wom to look at h the surface- difference i face of the the areola a ognize that these nipple word in its educed, dra

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One worc ple during

lactation. If there is an abundant secretion during pregnancy, it will be abundant when the time for nursing comes. Possibly some of you knew what it was, when boys, to drive the cows from clover-field to the milking-yard. I certainly did, and the air was no richer "when the early dews were falling" in the summer evening with the aroma of the sweet-scented clover, than with that of the milk dripping, dropping from the swollen udders. You knew that the buckets would be readily filled from these cows, who had been on such lactigenous diet. When a pregnant woman complains that she is always wet from oozing milk, her clothing stained with it night and day, comfort her for the inconvenience she now has, by assuring her that she will have an abundant supply of nourishment for her babe. Another sign of some value, though not so readily available, is the presence of lactose in the urine; a pregnant woman who has lactosuria will surely prove an excellent nurse.

The woman whose breasts I ask you now to look at has nipples scarcely elevated above the surface—indeed if it were not for the difference in color between the general surface of the breast and that part occupied by the areola and nipple, one could hardly recognize that the latter existed at all. What these nipples need is education, taking the word in its literal sense; they should be educated, drawn out. But how?

The simplest method is to have the woman use her thumb and finger, seizing the organ between them, and draw it out; let her do this ten minutes each day three or four times; further, she must be careful that there is no pressure from her clothing upon the nipple, and that space is given it for development—indeed, the use of a solid nipple shield will assist in its proper formation. A breast pump gently used may be employed, or simply a four-ounce bottle, the mouth of which will readily enclose the nipple, and into this bottle hot water is put for two or three minutes, poured out and immediately the mouth of it put over the nipple—the condensation of the vapor in the bottle creates a vacuum, and atmospheric pressure forces the nipple in. I am not at all apprehensive of the least danger of interrupting the pregnancy—though some have expressed much fear—by any of these means properly used.

One word more as to the care of the nipples during pregnancy, for it is not enough

to give them proper form, or, having such form already, to ensure uninterrupted lactation; they must be put in such condition that they will not probably suffer injury from nursing and will not become excoriated or fissured. It is many years since I first entered my protest against the means then, and still, commonly employed to prevent these accidents, that sometimes have such grave consequences in mammary abscesses and arrest of lactation. The means generally used are astringents and alcohol. My saying anything upon the subject seems very much like what poor Hood termed the piscatorial precept, "line upon line," for I have so often expressed my views upon the subject. Nevertheless as the constant dripping of water wears away the stone, so the frequent repetition of that view and the practice which is its sequence, may, if true, become generally accepted, and thus be beneficial.

First, though in regard to this point there is no dispute, the nipples ought to be kept scrupulously clean, by employing the means most used for securing cleanliness: soap and water; otherwise the secretion which oozes from them dries upon the surface, and when detached exposes a sensitive surface. But the nipple when in use is subjected to the action of warm moisture, and such action has a tendency to soften the epidermis and thus cause its detachment. Further, the nipple in use ought to have its surface pliable and yielding, not stiff and resisting. We know what nature does for inferior orders of animal life who are especially exposed to the action of water, for example. The ducks, for illustration, have no whiskey and alum or tannin reservoirs to cover their surface with as a protection in rain or pond or stream; but nature has given them an abundant supply of oil for this purpose. Nature has supplied the nipple with a vast number of sebaceous glands, just as she has the nymphæ, and for similar purpose. These glands of the nipple are increased in size and activity during pregnancy and lactation. And now comes an art most meddlesome and mischievous, I think, seeking with preparations of alcohol to dissolve and remove this fatty secretion, and by astringents to lessen the activity of the glands. Further, so far as the skin is concerned, the effect of these preparations is to render it harsh, dry, and resisting instead of soft and pliable. My belief is that letting the nipples alone would be far better than this practice. Nevertheless better than doing nothing, is

applying once a day to the nipple a little cocoa butter, such application compensating for the fatty matter that has been removed by soap and water. If the patient desires anything more she may bathe the nipples once a day with a little tincture of arnica or cologne and water. Daily exposure of the nipples to the air for a short time has been also recommended as a prophylactic against the traumatism of lactation.

Puerperal Septicemia.

The patient now presented, was brought to the Hospital suffering with septicemia, some week or ten days ago; she had been delivered a few days before her admission. There were diphtheroid—I will not say diphtheritic—ulcerations in the vagina and vulva. The curette was used in the uterine cavity, and the latter was washed out with a 2 per cent. solution of creolin; the ulcerated surfaces were cleansed and then swabbed with a mixture of carbolic acid and iodine. The patient's temperature upon admission was 103° , her respirations 36 and her pulse 118 to the minute. She is now completely convalescent, and I believe the local treatment has been her salvation.

This case illustrates a fact which cannot be too strongly emphasized. The cases of puerperal septicemia now seen at this Hospital are almost invariably those in which the disease originated outside; for so careful are resident doctors and nurses in the employment of aseptic precautions and of antiseptic means, that for a woman whose delivery takes place in the Maternity to have even mild septic infection is very rare. Only a few years ago, in entering upon my term of service, I would find two, three or more cases of puerperal septicemia transmitted to me by my predecessors, and several new cases would originate during my attendance. Some of these patients died although, of course, the large majority recovered. Experience has proved here, as in other lying-in hospitals, that this disease is preventable: and those who have given most study to the causes of puerperal infection hold that the origin is to be sought not in place or season, but in person; not in locality or in time of year, but in the individual who has charge of the woman in labor and in the puerperal state. As I have previously said, in this room, to an audience of nurses, the question naturally arises in every case of puerperal infection, "Who has sinned, the doctor or the nurse,

that this woman perishes or is in peril?" It is only exceptionally that one or the other of the parties referred to does not deserve blame. The presumption is that there has been an error of commission or of omission on their part, and the day surely comes when neither the public nor the profession will hold them guiltless. One of the most astonishing incredulities of certain members of the profession is the utter disregard for antiseptics in obstetric practice; you will read in medical journals occasional contributions condemning these means, at least indirectly; statistics of this and of that physician who ignores antiseptic agents, showing either a slight puerperal mortality, or none at all, from septic disease. The first thing to be observed is that this is merely negative evidence, and of comparatively little value. Next, that although these gentlemen have no septic mortality recorded, are they quite sure that there have been no cases of septic morbidity in their practice, a morbidity which may have permanently injured patients thus affected. Puerperal infection presents various characters, and the diagnosis is, in some instances, very difficult. Further, though two or three, or a dozen physicians, practicing in the country, present such favorable obstetric statistics, it is possible that an equal number of others, also ignoring antiseptics, could be found who have had no such favorable results. I believe that there is a larger proportional number of cases of puerperal infection in the country than in the cities, for the last census shows that the puerperal mortality is ten per cent. greater in the former than in the latter. Considering the greater vigor of the woman living in the country; the purer air and the simpler food she has, and considering, further, the vast number of child-bearing women in cities who, from poverty and ignorance, are in wretched hygienic circumstances, one might reasonably expect the mortality percentage to be the very opposite of what it is.

The fact that has been stated is worthy being pondered by every country practitioner, and especially by those who from their own limited experience and from that of a few others, are trying to impress the profession with the notion that antiseptics are unnecessary in obstetric practice.

One fact, which leads me to attach less importance to the opinion of a few of these gentlemen, is that they are believers in the autogenesis of puerperal septicemia in cer-

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tain cases, a convenient defence for a reproaching conscience if the disease occurs in their practice. My own belief is that there is no such thing as so-called autogenetic puerperal fever, that in almost all instances the external origin of the disease can be established beyond reasonable doubt, so that the exceptions prove the rule. Autogenesis, like the kindred doctrine of spontaneous generation, perishes in the light of scientific truth.

In a future lecture I hope to consider the prophylaxis of puerperal infection, and the diagnosis and treatment of the diseases resulting from such infection.

FRACTURE OF THE ULNA; NECROSIS.—SARCOMA OF THE RECTUM; COLOTOMY.—RESECTION OF THE WRIST-JOINT.—OSTEITIS OF TIBIA; TREPHINING.¹

BY JOHN H. PACKARD, M. D.,

ATTENDING SURGEON TO THE PENNSYLVANIA HOSPITAL, ETC.

Necrosis of Bone.

Gentlemen: The first case that I shall show you this morning is one which you saw about two weeks ago. I told you that the patient, a boy eight years old, had sustained a fracture of both bones of the forearm near the wrist-joint, and that this had been followed by some necrosis, a sinus leading down to the dead bone. But I could not then determine exactly the extent of the damage, and there was a considerable degree of inflammation of the soft parts: It was, however, certain that union of the fracture could not be hoped for until the dead portion of the bone was removed. I resorted to an old-fashioned but valuable remedy—a poultice—for the reduction of the inflammation; and then had the child etherized, enlarged the sinus, and readily extracted the piece of bone which I here show you. It is the lower end of the diaphysis of the ulna. You know that the long bones are developed by growth from centres of ossification, one being in the middle of the diaphysis or shaft, and the others in the epiphyses at its extremities.

Here the fracture took place near the end of the diaphysis, and the small lower fragment, being insufficiently nourished, died; after which it acted as a foreign body, and relief could only be had by its extraction or extrusion. My hope is that the end of the upper or main fragment may unite with the epiphysis; and in order to favor such an occurrence I have dressed the limb with the hand drawn towards the ulnar side, thus reducing to a minimum the gap between the two portions.

Result of Colotomy.

I shall now show you the result of an operation which I performed about two years ago for the relief of a very distressing affection—a sarcoma of the rectum. The patient, who gave her age as about 60, suffered greatly from constipation, the walls of the bowel being thickened and stiffened by the cancerous deposit in their substance. When the fecal matter was thin, it came away, but irritated the surface over which it passed; and its evacuation was always followed by a severe and long continued sense of spasmodic contraction, although the muscular coat probably could not really act in lessening the calibre of the gut. In order to give relief it was necessary to make an artificial opening into the canal, well above the seat of the disease. Remember the course of the colon or large intestine; as it descends along the left side of the belly, it runs (almost invariably) behind the peritoneum, and may be exposed and opened in the lumbar region, without injury to the serous membrane. Beginning at the upper and outer corner of the quadratus lumborum muscle, I divided the tissues outward and downward almost as far as the crest of the iliac bone. Layer by layer was cut through, until I came to the bowel, which I opened, and stitched the edges of the orifice to those of the wound in the skin. Healing took place very readily, and the fecal evacuations have been through this artificial opening ever since. The patient has gained flesh and strength, and has been about her usual avocations. Of course the disease has not been cured, but the suffering caused by the contact of fecal matter with the probably ulcerated surface has been wholly relieved. There are no involuntary evacuations, and nothing would indicate to those about the woman that she has an artificial anus. Some high surgical authorities have condemned this operation, on the ground that it placed

¹ Delivered at the Pennsylvania Hospital, Dec. 18, 1889.

the patients, they thought, in a condition so disgusting to themselves and those around them that death would be preferable. Such a result I have never seen. In the first case in which I operated, in 1873, the patient was made extremely comfortable, and lived so for eight months, when she succumbed to the original disease, the womb being involved as well as the bowel.

Resection of Wrist-Joint.

This patient was before you two weeks ago, and you will remember that I then told you that she had sprained her wrist about four weeks previously. Why, I cannot tell, but in this case this slight injury has been followed by destructive inflammation in the joint. Her pain has been intolerable, and I have advised amputation through the forearm; but she naturally shrinks from this, and I shall therefore resort to resection of the diseased bones. This is an operation which is not often done, and which rarely gives a satisfactory result; but I am willing to make the attempt to save this poor woman's hand, even if its complete usefulness cannot be restored.

Let me say that I should not advise any interference, but for the fact that even with thorough extension it has proved impossible to relieve the pain of which this patient complains by day and night. Extension has been made here by means of rubber adhesive plaster, one strip around the hand and the other around the upper part of the forearm, the ends being then brought around the ends of a straight splint reaching from the elbow to the tips of the fingers, and joined by a loop of bandage; the degree of tension is of course determined by the pull exerted on this as it is tied.

Various plans have been adopted for excising the wrist; the one which I shall employ will enable me to avoid injury to the tendons, and thus to preserve as far as possible the usefulness of the hand. I shall make at the outer side of the joint a slightly-curved incision, about three inches long, and at the inner side another. Cutting right down to the bone, I find it roughened, and the periosteum loosened from it. By means of this strong steel elevator I detach the periosteum at the front and back of the ulna, and then do the same for the radius; I now push this eyed probe across both bones, beneath the periosteum, and of course beneath all the tendons, and threading the eye with a ligature I am enabled to draw a chain-saw

through. Protecting the soft parts by this bone-director on the dorsal side of the bones, I divide these latter, and extract them with bone-forceps. Finding now that the upper row of carpal bones are diseased, I dissect them out, using for the purpose a blunt bone-knife. You will note that although no named vessels have been injured there is very free bleeding; this is always to be looked for when we are dealing with inflamed bone or periosteum. A free irrigation with hot sublimate solution will materially control it, and it will be quite checked by dusting in powdered iodoform.

Passing a rubber drainage-tube through from one side to the other, I close each wound with three or four points of catgut suture, apply the usual dressings, and place the part in a Levis's splint.

Understand distinctly that I have very little expectation of the restoration of usefulness to this hand; but I know that what has been done will take off tension, and possibly the result may prove better than we can venture to predict.

[The wounds in this case healed very well, and in a few days the patient ceased to complain of pain in the part; she suffered severely from an attack of "grippe," but was discharged, very well satisfied, in February. The ultimate result cannot yet be pronounced upon.]

Osteitis of Tibia.

This patient, a girl aged nineteen, has inflammatory softening of the upper part of the tibia—a very frequent seat of such trouble, which sometimes terminates in the formation of abscess, and is very painful from the unyielding character of the structure. About three months ago I operated on this patient, trephining the wall of the bone; but the relief given was only temporary. I lay the bone bare by an incision through the cicatrix of the one formerly made, turn the periosteum aside, and apply the trephine close to the same spot as before. The bone is evidently softened. I carry the instrument on through the cancellous structure, until it ceases to meet with resistance. Now I pass a probe through the trephine-hole, and it enters a cavity, which may be the upper end of the medullary space. There is rather free bleeding, but it is checked by irrigation with hot sublimate solution. I put in a drainage-tube, and apply the usual antiseptic dressing. It would not have surprised me had the trephine opened an ab-

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cess-cavity, nor indeed if a central necrosis had been exposed; but I believe this operation will be effectual in relieving the patient.

[This patient had no further pain, and the wound healed very readily; she was discharged, cured, early in the month of January.]

COMMUNICATIONS.

SUCCESSFUL SUPRA-PUBIC LITHOTOMY IN AN OLD MAN.

BY J. McFADDEN GASTON, M. D.,
ATLANTA, GA.

Being summoned to West Point, Ga., by J. S. Horsley, M. D., to co-operate with him in the management of an old gentleman's case, I learned that he had been treated previously by another member of the profession, with bougies for the dilatation of his urethra. He had failed to discover the true cause of his troubles upon sounding the bladder, and declared, upon hearing that stone had been detected by Dr. Horsley, that he would eat all the calculi that might be taken from the patient's bladder.

Upon a full investigation of the case I concurred in the propriety of an operation, not simply for the removal of the calculi, but for subsequent drainage of the bladder to relieve the cystitis.

While there were some considerations favoring perineal incision, greater advantages were presented for the supra-pubic operation.

Before giving the details, I will note the previous record, made by Dr. Horsley: "Lee, James, white, 76 years old; saw case first on October 27, 1889. Patient gave history of having suffered from bladder trouble for three years; had been under care of various physicians, some of whom had examined for calculus, but without success."

Examination of urine showed it loaded with crystals of triple-phosphate and uric acid. One week later an exploration with Thomson's sound revealed the presence of a stone, apparently about one-half inch in diameter. On November 20, 1889, after some preparatory treatment, an attempt was made, with the assistance of Drs. Patillo and Winston, to crush the stone with Civiale's instrument. The stone could not be grasped, although the patient was etherized. On

November 28, however, the patient being etherized by Dr. Patillo, and Dr. Winston acting as assistant, litholopaxy was successfully performed, and two stones, one-half and one-seventh inches in diameter, were crushed and were evacuated with Otis' apparatus. No more calculi could be felt at the time.

The patient bore all the manipulations well, but continued to suffer with the evidences of calculus. Examination revealed—though imperfectly—the presence of calculi; but attempts with Civiale's and Bigelow's instruments failed to catch the stone. The patient's sufferings increasing, supra-pubic cystotomy was decided upon.

This operation was undertaken March 17, 1890. A hypodermic of one-fourth grain of morphia and one-one-hundred-and-fiftieth of a grain of atropia was administered by Dr. Winston, and the anæsthetic of A. C. E. mixture was entrusted to Dr. Patillo, with the assistance of Mr. J. Patillo.

As soon as the patient was unconscious the searcher was introduced by Dr. Horsley, who verified his former diagnosis of the existence of several calculi, which was then confirmed by the examination of Dr. Gaston.

An elastic catheter was then introduced into the bladder and its cavity was washed out with a warm solution of boric acid until it returned clear. At this stage a Barnes's uterine dilator was rolled lengthwise and passed into the rectum. A warm solution of boric acid was injected into the bladder until it contained seven ounces. Eight ounces of warm water being injected into the rubber bag in the rectum, the prominence of the bladder above the pubic bone was detected by the hand over that region. The pelvis was raised by placing a pillow under the hips of the patient.

Dr. Horsley now proceeded to make an incision three inches in length in the median line, extending from the pubic bone upward and dissected through the adipose tissue and fuscus until the cut was carried in the central part down to the cellular tissue covering the bladder.

It was thought best, with a view to lift the peritoneum higher, that the injection should be increased; and as Dr. Horsley had verified on a previous occasion from retention of urine, a capacity of ten ounces for the bladder, the injection of fluid into it was increased to that extent; and the injection in the rectal bag was carried to

twelve ounces. There was no longer a doubt in regard to the removal of the peritoneum from the field of operation by a finger hooked into the upper angle of the wound, and with a teneculum securing the walls of the bladder at the lower angle, a cord of four threads of silk was carried through the wall of the bladder on each side. These being looped by knotting the ends were held by assistants while the final cut into the bladder was made between them to an extent for the finger to be introduced, when the presence of numerous calculi was detected. With the aid of stone-forceps a calculus corresponding to the size of a partridge egg was immediately extracted, and others of smaller size were removed with the same instrument, when the further progress was interrupted by passing two stitches of iron dyed silk on each side through the margins of the bladder and skin so as to approximate the cut edges. The boric solution was now thrown fully as a douche into the bladder, and the search for calculi with the finger was resumed by Dr. Horsley, and he succeeded in extracting in all twenty-eight calculi of various shapes and sizes. The warm boric solution was passed again into bladder and allowed to run out of the incision, until it was free from stain of blood or admixture of any kind.

A very remarkable projection into the bladder was caused by the enlarged prostate gland, and it was found that while there was no difficulty in passing a No. 32 bougie through the urethra, it could not be made to emerge into the cavity of the bladder, owing to the obstacle of the prominent prostate. It was not thought expedient to add to the risks of the patient by attempting any operation upon the prostate on this occasion; and yet at a future day an excision of the middle lobe may be practicable.

The bladder wall was considerably thickened and its structure rather brittle, as was found by the teneculum tearing out when a strain came upon it from the escape of fluid by incision, and its feasibility was also shown by the needle turning out when first inserted through a small portion of tissue. This would indicate that caution should be observed in not carrying the distention too far by injecting, lest rupture into the cavity of the abdomen might occur.

Two drainage-tubes, consisting of soft catheters, were secured in the lower angle of the incision by attaching them to the cords left in the walls of the bladder and con-

doms were attached to the outer ends to receive the urine. The upper angle of the wound was packed with iodoform gauze, and absorbent cotton was placed over all and a rubber passed around the pelvis.

The patient rallied promptly from the A. C. E. anæsthetic and had no nausea or vomiting subsequently. He complained of general discomfort in an hour after consciousness returned, and another hypodermic of morphia and atropia was given, with a happy effect.

Prior to the operation the temperature had been normal and the pulse about 100 to the minute; and upon examination during the afternoon there was no change of consequence.

On the next day Dr. Horsley's report at 7 A. M. was: pulse 100, temperature 100°, respiration 20; at 2 P. M., it was: pulse 84, temperature 100°, respiration 20 and the patient resting well.

March 20, he reported continued progress; pulse 80, temperature 98.7°, appetite fair, bowels moved by means of Rochelle salts. The patient rested fairly well last night and is bright and cheerful; the wound looks well, drainage does well, kidneys are acting well and the case is altogether hopeful.

March 22, the patient was still doing well, pulse 78, temperature 98.7°, the stitches caused some pain and were removed.

March 24, improvement continued, the wound was looking healthy, the appetite was good and the patient was sleeping well. He was then considered out of danger, with the expectation that the drainage would afford relief to the cystitis.

The following additional report was received from Dr. Horsley, under date of April 4, 1890:

"Our case has progressed steadily and uninterruptedly towards recovery. We had no complications threatening the success of the operation at any time. The temperature never went higher than 100° F. The wound is now granulating nicely, and is about one inch in length. The urine is free from the tenacious muco-pus which was so abundant before and for a few days after the operation. I do not think it proper to allow the wound to close, as the prostate is still tender. Before closing the wound, I purpose having the patient let the urine accumulate in the bladder by wearing a rubber compress over the opening, and to try the outlet by the

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PNEUMONIA: WHAT IS IT?

(FOURTH PAPER.)

BY HIRAM CORSON, M. D.,

CONSHOHOCKEN, PA.

In my last paper several cases were introduced which were treated by our country, or, if preferred, village doctors. They were all spoken of as pneumonias, simple pneumonias. In the *University Medical Magazine*, April, 1890, a case is reported by W. Henry Price, M. D., as occurring in the University Hospital (service of Dr. William Pepper) which is called: "Pneumonia complicating Epidemic Influenza." The readers of the REPORTER will therefore please to bear in mind that every case reported by the Conshohocken physicians occurred during the prevalence of that same epidemic—*la grippe*—and were, as truly as Dr. Pepper's case, pneumonia complicating epidemic influenza. I say this in order to give my country brethren fair play—an even start; for I shall here give the Dr. Price case in full, word for word; and then let it be compared with those published in my third paper. Dr. Price writes:

"William A., aged 46, came to the Hospital, Jan. 7, with a well-marked case of influenza, showing the ordinary symptoms: head-ache, back-ache, pains in the limbs, lachrymation, coryza, and some cough with expectoration. Besides these, he complained of a 'stitch in the right side.' He was put immediately to bed, ordered *stimulants and tonics* (Italics mine), and a cotton jacket encircling the chest was applied, in addition to strong counter-irritation over the seat of pain. At this time auscultation gave a localized friction rub at the end of inspiration, and percussion showed impaired resonance over the same area. The pain continued, and antipyrin in five-grain doses, repeated thrice daily, was ordered, with considerable modification of his sufferings. The disease, however, spread upward, and friction râles became more diffused; but no exudation could be detected in any position of the patient."

"He now,"—we are not told when, on what day—"now" refers to—"began to expectorate rusty sputum, although this was much less tenacious than that typical of

pneumonia. Physical examination detected increased fremitus and bronchial breathing over the right upper lobe. At this time the temperature ranged about 103° to 104°; respirations were up to 48, and pulse rate 120. The next day he showed signs of circulatory embarrassment, and, although *cardiac and respiratory stimulants were pushed both by the stomach and hypodermically, he gradually sank and died on January 14, 1890.*" (Italics mine.) It would seem that as the man is dead and the treatment, such as it was, at an end, I might rest my case here; but no, the narration goes on; and I must go with it.

"The autopsy demonstrated the following points: Upon opening the pericardium the heart was found to be twice its normal size, mainly from over distention of all the cavities, which were filled with currant-jelly clots."—Clotted blood I suppose.—"Cardiac veins were also distended. The right heart and both venæ cavæ showed special engorgements. There was no change in muscle or valves, and no pericarditis. Right lung was completely consolidated throughout its upper lobe, which was entirely free from air and showed gray hepatization. The lower lobe showed spots of catarrhal pneumonia with still other regions of congestion. The middle lobe was entirely free from disease. All the lobes were highly adherent to each other from old pleurisy, and over the entire pleura was an exudation of fresh lymph. The left lung, together with all the other organs, were perfectly sound."

It is a comfort to me to have this case to compare with those of the country physicians who have reported their cases, which were in every way like this one, save that their patients were worse, and that they recovered, while this one died. They, like this man, were suffering from the prevailing epidemic, to which was added the congestion and inflammation of the lung to a high degree. They were indeed serious, most dangerous cases, but were promptly treated by the means which, in the practice of these physicians, had so often proved successful, that, despite the doubts and fears of the patient's friends, the responsibilities which confronted them and the knowledge that popular feeling was against their measures, and the leaders of the profession loud and unceasing against their plan of treatment, they asked for no consultants, but with a confidence created by numerous successes, used the best of all known means—free venesection—to relieve their suffering patients from the engorge-

ment of the lungs which was suffocating them.

Drs. George B. Wood and Bartine have graphically described the distention of the blood-vessels and especially those minute arterial terminations called capillaries. Whenever my mind turns to the consideration of the congested and inflamed lung, I can see no relief for it, save by unloading these vessels by venesection. Can it be done by antipyrin, or by arterial sedatives to hold the pulse below eighty, as taught by Dr. Bartine? Or by stimulants—the name for doses of brandy or whiskey, as used in Dr. Price's, or, rather, Professor Pepper's case—when “pushed” and used hypodermically? To these questions I might say No; but I prefer to give, as an answer, the apt illustration which was given by Professor Samuel D. Gross in a discussion on this subject, in the Pennsylvania State Medical Society, at Easton, some years ago. I once used it in a former paper; but it is so true and convincing that it will bear repeating, especially as many readers of the *REPORTER* have never heard it. Professor Gross said: “Should a man have a congestion and incipient inflammation of the conjunctiva, so that the sclerotic coat would show an intense redness, and the patient was then bled, while in an erect posture or sitting on a chair, until there was an approach to syncope, the redness would disappear; the capillaries being emptied of the blood which had distended them. Just in the same manner would the capillaries of the lungs be relieved, and, in a case of pneumonia the increased action of the heart be modified.” Two valuable results from one of the safest and most pleasant remedies, followed by no pain or sickness or unpleasant effect on the brain or nerves, as is caused by almost any medicine in an efficient dose. Dr. Gross continued: “The exhibition of tincture of veratria or tincture of aconite in a dose to reduce the frequency of the pulse much below the normal rate, would produce no change in the appearance of the eye-balls, as the capillaries would not be unloaded by the mere slowing of the pulse.”

It seems to me that just now and here is a proper time and place to call attention to a most important consideration: one that does not appear to have been regarded as of any consequence by the uses of arterial sedatives. I allude to the slowness of its action, when prompt relief is the only safety. In every case presented by the Conshohocken doctors,

they, on seeing the patient oppressed and embarrassed in breathing by the congestion of the lung, realized that there should be no delay in applying their means of relief; and, expert as I know they are in the use of the lancet, the blood was spouting from the median basilic vein in less than ten minutes, and the patient experienced, as the blood was flowing, a sense of relief which increased as the blood continued to flow. I have rarely bled a person thus oppressed in pneumonia, who has not in a few minutes after the operation spoken of the relief obtained by it.

Now, I want the attention of the reader. Not one of these three physicians would have been willing to leave his patient until the next day without bleeding him. No, not for a single hour; knowing full well that such absence would seal the patient's fate. You ask, “Why is this haste necessary? Are there not very great congestions and intense inflammations which do not terminate fatally, though not treated by blood-letting? which even go on to suppuration, and yet the patient survive: notably, mammary inflammation in females?” Yes; and this may serve me well to show why in this case—mammary abscess—the treatment by arterial sedatives or waiting for a crisis may be continued from day to day, and life be not even threatened; because, although it is *on* the chest, it is not *inside* of the chest, distending the blood-vessels and the minutest capillaries, and blocking up the air cells, so that the patient is threatened with suffocation if not relieved. How utterly useless these arterial sedatives are even in mastitis, we all know. But they serve to make the patient believe something is being done for her. I have conversed with many persons who rely on these medicines, and have found that they generally use doses which have to be repeated every two or three hours for a whole day, indeed oftentimes much longer before the medicinal, or rather poisonous, effect is produced. This waste of time waiting for its action is of little moment in mastitis and many other inflammations in parts of the body not necessary to the continuance of life; but when the brain, the heart or the lungs are attacked there should be no talk of tendencies to recover, no waiting for a crisis, no dependence on the let-alone doctrine; but an energetic use should be made of efficient means of cure. Should a patient, fairly under way with pneumonia, be treated by a reformer,

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and wait hours upon hours for the slow action of his remedies, the congestion and inflammation rapidly increasing, and with their increase his sufferings becoming more and more intolerable—and there are few conditions harder to bear than the struggles for breath—he would soon be beyond the possibility of recovery. The mammary gland may be allowed to suppurate or be cut away by the surgeon and life not be endangered; but the blocked-up lung must be relieved before the suppurative process is reached or death is almost, if not wholly, inevitable. Dr. George B. Wood has told us that it is doubted whether recovery ever takes place in the third or suppurative stage.

I have been tedious in presenting the importance of prompt action with efficient measures, and the danger of the inevitable delay which accompanies and is inherent in the methods of treatment, followed by the "arterial sedative," "waiting for crisis," do-nothing people called reformers.

But I did my best; and it has been well said:

"Who does the best his circumstance allows,
Does well; acts nobly; angels can no more."

Let us now return to Dr. Pepper's case. The patient was a man aged 46 and in the prime of life; every organ in his body was sound and performing its functions properly, save only the right lung, which was moderately affected in its lining membrane, as was common with hosts of people during the time of the epidemic, *la grippe*. There was, too, a "stitch" in the side and a general malaise such as accompanied the recent influenza, and "some cough and expectoration." "He was immediately put to bed, ordered stimulants and tonics, a cotton jacket, and strong counter irritation over the seat of pain." I am truly thankful to have this case. The hospital physicians had it in its early, remediable stage; and it was under the care of the great leader—or one of the leaders—of the medical profession in the United States; and to his teachings and treatment the hosts of practitioners who denounce blood-letting in all diseases look for guidance. Well, then, what did he do for this sick stranger? At once he "ordered him stimulants"—whiskey or brandy, no doubt—and "tonics"—quinine certainly. He should have told the readers of the *University Medical Magazine* why he ordered this treatment; should have given some good, convincing reason for it. He should

have told the students, and also the readers, what was going on inside of the chest; what caused "the stitch in the side, the cough and expectoration," and that the remedies which he ordered were adapted to the removal of these diseased conditions. An experienced physician like the one who had charge should surely have known that there was some bronchial affection; and the stitch in the side should have been to him an indication that there was mischief being enacted in the lung or the pleura. Believing these conditions to exist, were stimulants—alcoholic stimulants—needed? How did he expect them to act, so as to bring relief to his patient? Were they not, by their well-known mode of action on the human system, positively interdicted, because of the almost certainty that they would increase the inflammation in the bronchi and the lung tissue?

But what are the facts? Despite the stimulants "the pain continued." What a stubborn kind of pain it must have been, not to yield the field to stimulants! It seems to have had no reverence for whiskey. But the physician was not to be baffled. He earnestly and determinedly engaged in battle with the disease, and prescribed his most potent remedy for "stitch in the side": the celebrated, but wayward antipyrin, in five-grain doses, three times daily. That is, a dose about every six waking hours, which allows the disease an open, unobstructed way before it, to seize on more of the lung. The morning dose has been given—the patient feels no relief, but waits and suffers for six hours more; then comes a second dose, but still no relief; and again six hours of suffering and waiting for the third dose. How many days this went on we are not told; but until the *doctor* thought there "was considerable modification of the suffering." But what was the patient's real condition? Listen to the doctor: "The disease, however, spread upward, and friction râles became more diffused;" in spite of the "considerable modification," I suppose. "He now began to expectorate rusty sputum." Poor fellow! While the doctor was waiting in vain, day after day, for good effects from stimulants and antipyrin, and despite a seeming or fancied modification of your sufferings, pneumonia was rapidly developing, indeed had fully developed; for, in the doctor's words: "At this time the temperature ranged about 103° to 104°, respirations up to 48, and pulse rate 120." (Oh, that a

Conshohocken doctor could then have been at your bedside !)

We are not told what was done that day ; but from what follows we are justified in believing that the administration of stimulants was continued with increased force, for the narrative thus proceeds : "The next day he showed signs of circulatory embarrassment" (which means, I suppose, that the man was greatly oppressed, the heart laboring vainly to keep the right side open to receive the blood from the two great veins which were crowding it upon that organ) and, although cardiac and respiratory stimulants were pushed both by the stomach and hypodermically, he gradually sank and died on January 14, 1890."

Such was the treatment of a case as favorable for recovery, under such treatment as our country doctors gave to their patients, as ever occurs. The autopsy showed that every organ of the body was perfectly normal, save the right lung ; and of that only the uppermost lobe was affected with pneumonia, besides a few spots of catarrhal pneumonia, and other regions of congestion in the lower lobe. The middle lobe was entirely free from disease. The left lung, with all the other organs, was perfectly normal. There was no disease of the muscles or valves of the heart—no pericarditis. The man died from an uncomplicated pneumonia of merely one lobe of the right lung. No, I cannot say that ; I fear the stimulants and quinine and antipyrin helped the disease. Behold the condition of the heart ! "Twice its normal size," mainly from over distention of all the cavities, which were filled with currant-jelly clots. "The right heart and both venæ cavæ showed special engorgements. Cardiac veins were also distended." What caused the heart to be in this condition ? Not loss of blood, I ween. I dislike to dwell on this case : one of the most favorable for treatment, and which came under the notice of the physician in its earliest stage. Lay it alongside of the Conshohocken cases, and see how much worse every one of them was when the blood-letting was resorted to ; see the relief it brought, and the fact that the patients were saved. One word more in condemnation of beginning the treatment of such a case with stimulants and persisting in their use, and increasing and "pushing" them, day after day, until the heart, distended almost to bursting, gave up the struggle against doses of alcoholic liquors, pushed with increased force as its

contractions failed. What a sad picture ! a man suffocating ; a heart filled with currant jelly clots which have blocked up its every cavity, after distending it until it could be enlarged no more—still having stimulants poured down his throat and injected under his skin ! And for what ? Tell us why it was done, or forever cease denunciations against blood-letting.

Professor Samuel D. Gross was a strong advocate for blood-letting in pneumonia. His address before the American Medical Association is a grand appeal for its use ; and, in a paper published (I think) in the *County Practitioner*, he wished that his voice in its favor "could re-echo to the ends of the earth." His son, ill with pneumonia, died without receiving the benefit of that means of cure. Many years ago Professor Joseph Carson, M. D., said that Dr. Ezra Michener was one of the best practitioners and writers of medical papers in our State. No stronger advocate for the use of the lancet in pneumonia and some other affections was known anywhere, even to the day of his death, which occurred only about ten years ago, when he was 92 or 93 years old. When he was in his 87th year he fell and broke his humerus near its upper end. "Five days afterwards he felt quite poorly and chilly, with aching pains in the maxillary glands, in the afternoon ; in the following night he awoke with fever, with weight and a burning sensation in the right thorax ; the breathing was oppressed and hurried." Dr. Stubbs, who was called to him, diagnosed pneumonia ; but doubted whether it would be safe to bleed him on account of his great age. Dr. Michener said : "It must be done. If I have but a little blood in store, a proportionate quantity should afford relief, especially now in the congestive stage." What confidence in the remedy, which he had used successfully hundreds of times ! He said : "I will sit up, a less quantity of blood will suffice." Dr. Stubbs bled him ; and when he drew his first free breath, the flow was stopped. Fifteen ounces had been taken from this thin, spare, old man ; and the relief was perfect. Dr. Stubbs, in his report, says : "If bleeding will do this for a thin, spare man of his age, what ought we to expect from its use in young and plethoric subjects ?" And, let me add, what might we expect in a man 46 years of age, sound in every organ of his body save one lobe of one lung ? Contrast the treatment confided in by this old man, with an experience reaching from 1816 to 1881,

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with the hospital case. In the one there was immediate relief by the means used, in the other a steady increase of suffering and finally death in seven days.

It is matter of regret to me that necessity demanded these papers. I have seemed to make the two great medical schools of Philadelphia special points of attack. Circumstances favored this; and it was appropriate; for they are the leading medical colleges and hospitals of America; and their teachings and practice are received as medical gospel in every college and hospital in all our vast country. A reform there would be the prelude to reform in all.

In view of my advanced age, it is not probable that I shall ever address the readers of the *REPORTER* again on this subject. These papers have been written in sorrow, not in anger. I claim for myself no exceptional goodness; have no faith in cold and formal prayer; have never reached that humble state in which I could "turn the other cheek" to the smiter; yet as regards those who persist in a most erroneous and dangerous treatment of pneumonia, and denounce the means so successfully employed by the profession for more than a century, I have often desired to make my own that beautiful appeal which has come down to us through almost nineteen centuries, as redolent as when first uttered of mercy, charity and forgiveness: "Father, forgive them, they know not what they do."

SYRUP HYDRIODIC ACID *vs.* ALKALINE IODIDES.

BY A. E. NORTON, A. M., M. D.,

PHILADELPHIA.

Our attention, in practice, is being constantly directed to the fact that the iodides of the alkalies are exceedingly repugnant, not to say nauseating and irritant forms for the internal administration of that valuable alterative and antiseptic, iodine.

We have had much difficulty in administering iodide of potash in cases where its use should be prolonged; not only on account of its direct irritant action, but also by reason of its destructive influences upon the gastric secretions; the caustic alkali neutralizing the natural acids of the stomach, thus causing anorexia and other evil symptoms.

We have repeatedly attempted to mask the bad properties of iodide of potash by using it in conjunction with various vehicles, but with only limited success. Women and children, usually, greatly dislike any mixture containing the potassium salt, and a delicate stomach will seldom retain sufficient to produce beneficial results. For a number of years past I have used as a substitute for the alkaline iodides, iodide of hydrogen or hydriodic acid, in a syrupy form; and where I have found it necessary to place the system under the influence of iodine, or wherever that element was indicated internally, I have never found any form of iodine to give the prompt and satisfactory results that I have obtained from the use of this admirable preparation. But before speaking further of this iodine compound I wish to show why the alkaline iodides are objectionable as means for administering the element in question.

In my opinion, which is substantially the same as that of many other physicians, potassium iodide, the most frequently prescribed salt of iodine, is the least desirable of all the iodides of the alkalies. It is more apt to irritate the mucous coating of the stomach than either the ammonium or sodium iodides, and it cannot be so freely given as either of the latter salts; nor can the medication be so long continued. When we come to subject these drugs to an analysis, the reason for this difference is so apparent that one is not required to be well versed in chemistry to discern it. I will attempt to demonstrate:

The equivalence or combining power of iodine being 127 and that of potassium 39.7, they naturally unite in that proportion to produce potassium iodide, and the finished salt, as we find it on the market, contains 24 per cent. of its alkaline constituent—potassium. This large amount of alkali more than neutralizes the natural acids of the stomach, causing nausea, loss of appetite, etc. The sodium salt is frequently resorted to on account of its lesser tendency to irritate; but from the fact of its also containing a very large percentage of the alkaline salt, sodium (the combining power of sodium being 23), it is open to the same objections that are found with the potassium salt, though perhaps its pernicious effects are less frequently observed.

Ammonium iodide is thought by some to possess certain advantages over either of the above salts of iodine; but it also contains a

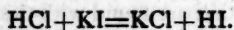
large amount of alkaline salt, as a carrier for the iodine; and, in addition, is rarely found on the market uncontaminated with iodate and other impurities which render it objectionable.

The syrup of hydrogen iodide or hydriodic acid, however, seems to me to be, theoretically and practically, the ideal form of iodine, inasmuch as it is as palatable as an elixir, having a gratefully acid taste, being perfectly colorless and beautiful in appearance.

Twenty years ago the fact of a medicinal product being handsome in appearance and appealing pleasantly to the palate would probably, of itself, bear little weight; but in the present epoch of elegant pharmacy, when the tastes of the people are educated to pleasant remedies, the agreeableness of a medicinal preparation, when accompanied by merit, necessarily furnishes one of the strongest incentives for its adoption.

In hydriodic acid the element hydrogen, which is used to combine with iodine in the formation of hydrogen iodide, is gaseous, and, being a monad element, its equivalence is but one; it therefore unites with iodine, also a monad element, having the atomic weight one hundred and twenty-seven. It will readily be observed that the two elements unite in the direct ratio of 1 (hydrogen) to 127 (iodine) and here, at the very foundation of the preparation, is where the perfection of the compound is seen to advantage. It will be observed that the carrying, the basilous element, hydrogen, is represented in a quantity less than 1 per cent. Contrast this formula with that of iodide of potash, containing 24 per cent. of caustic and irritant alkali as a carrier for its equivalence of iodine. Contrast it with any other form of iodine now in general use, and from every point of observation the advantages will be found in favor of hydrogen iodide.

I have found the syrup more assimilable than other forms of iodine, and account for the fact thus: When an alkaline iodide is placed in the stomach, its alkaline constituent unites with the free hydrochloric acid found there, and by the following reaction produces hydriodic acid:



Certainly the amount of hydrochloric acid found in the stomach is very small, but the fact that it unites with the potash of potassium iodide, with the above result, is be-

yond a doubt; and as nature supplies additional quantities of hydrochloric acid, it continues to unite with the potassium salt in the above manner, until all available salt is converted. While this is going on the hydrochloric acid, so needful for digestion of food, is being appropriated for other purposes; thus the general upheaval of the stomach, frequently met with when administering the alkaline iodides is evinced by nausea, eruptions on the skin, etc.

When iodine is administered in the form of hydriodic acid it is already prepared for assimilation, and being in itself slightly acid, robs the stomach of none of its necessary constituents, and therefore no evil effects are observed. In the practical use of the preparation I have found it to possess but one disadvantage, and that one not very serious. It consists of its incompatibility with some of the metallic salts, though combinations may be made with vegetable tinctures and fluid extracts, or with bichloride of mercury, which latter drug I frequently combine with the syrup hydriodic acid, the combination producing the same familiar reaction which is observed when iodide of potash and the bichloride were brought in contact, viz.: biniodide or red iodide of mercury, which is redissolved by an excessive quantity of the iodine compound. I have frequently prescribed the syrup of hydriodic acid in conjunction with arsenic and its preparations, particularly Fowler's solution, and have noted excellent results where this form of medication seems indicated.

Hydriodic acid is, by no means a "new remedy," though its use has been limited on account of its extreme delicacy, as usually prepared.

The dose of the syrup, speaking from my own observations, is from a few minims to half an ounce, and the same should be highly diluted with water. One teaspoonful of the syrup is equal in therapeutic strength to about five grains iodide of potash. Fifteen-minim doses, frequently repeated, will give prompt relief in bronchial and asthmatic difficulties. In psoriasis; enlargements of the thyroid gland, and other glandular enlargements; in syphilis; spinal sclerosis, etc., the dose employed should be from one to two teaspoonfuls, three times daily, preferably at meal-time.

I think if those of my professional brethren who feel the want of a particularly fine iodine preparation, will give the syrup of hydriodic acid a trial, they will find it all

that could be desired. I, personally, consider it a *sine qua non*.

A CASE OF DETACHMENT OF THE ALVEOLUS AFTER EXTRACTION OF THE TEETH.

BY C. H. M. NEALL, M. D., D. D. S.,
PHILADELPHIA.

A patient called at my office to have eight teeth extracted, with the roots of the first and second molars of the upper jaw. After extracting the two centrals, two laterals, and the canine of the right side, the alveolar process became detached and came down to the extent of half an inch. I used my extracting forceps and cut through the alveolus in extracting the roots of the first and second molars to loosen them so as not to cause any more displacement than what already existed. After finishing the extraction of the teeth, I forced the alveolar process back into its normal position by firm pressure, and adjusted a piece of cork to fit the alveolus perfectly. The cork contained a number of holes, to allow of free drainage in case of any discharge, and I treated case antiseptically. The cork was held in place by means of a "roller bandage" closing the jaws. The patient received all nourishment by means of a glass tube. The antiseptic mouthwash contained ten drops of carbolic acid to the fluid ounce of water. In three days the patient returned to my office and I removed all the dressings, finding everything doing very nicely. In about twelve weeks she returned, the process firmly healed, and I took an impression of her mouth, and made a full upper denture.

This is the first case that has come under my observation, but I have heard of other cases similar to mine.

While writing of this case for medical men, to whom an accident of the sort would be more embarrassing than to one who makes a specialty of dentistry, I would like to add a word in regard to the importance of some knowledge of dental medicine to all physicians and especially to those who practice in the country. Many physicians are so situated that it is necessary for them to extract teeth comparatively often, and usually they have to perform this duty with an altogether insufficient preparation for it.

Numbers of teeth attempted to be ex-

tracted are fractured just through the inability of the physician to decide what kinds and forms of forceps to use.

I believe that all medical schools should devote time to a careful study of the teeth as well as to the other branches of medicine, and have demonstrations on patients in the clinic, so that students can see for themselves what forceps are used, and how they should be applied.

REPORTS OF CLINICS.

WOMAN'S HOSPITAL, PHILADELPHIA.

SURGICAL CLINIC.—PROF. JOHN B. ROBERTS.

Scapular Abscess.

James B., 7 years old, colored, entered the Hospital Nov. 5, 1889, suffering from an abscess over the shoulder-blade. The abscess was tubercular, and about the size of a man's fist. On entrance, the patient's temperature was 103.5°, his pulse 102, and his respiration 33 per minute. The child was emaciated, had a hot, dry skin, and parched lips. The shoulder was stiff, and painful when movement was attempted. The patient was etherized and the abscess was freely opened, and, after its evacuation, well curetted. A drainage-tube was then inserted, and the wound closed. Dry antiseptic dressings were applied, and the shoulder and arm immobilized.

Tenosuture of Radial Extensor Tendons.

Three years before the boy had sustained an injury of the left wrist by being cut with an axe across the radial side of the wrist; whereby the extensor tendons of the thumb, and the tendons of the extensores carpi radialis longior and brevior, were divided. The wound had been sewed up and allowed to heal, without the surgeon having united the several tendons, and the child now suffered from traumatic wrist-drop, being totally unable to extend the radial side of wrist and the thumb. After the abscess upon the shoulder had sufficiently healed, Dr. Roberts had him etherized in order to correct the deformity of the hand. A longitudinal incision was made in the direction of the tendons, and the severed ends of the

extensores carpi radialis longior and breviar were found and stitched together. The operation was tedious, because by this time the upper ends, which had retracted at the time of the injury, had become agglutinated with the surrounding tissue in the vicinity of the annular ligament, and it was difficult to distinguish them until the tendons had been found above and followed downwards. The distal ends of the tendons were only discovered by knowing their attachment to the metacarpal bones of the index and middle fingers, because they had become atrophied and appeared as small portions of fibrous tissue. Pulling on them, however, extended the wrist and established their identity. Only a union of the extensors of the wrist was attempted; as in a child of seven years the thumb tendons are so small that after three years atrophy it would be almost impossible to find them, and, therefore, it was deemed wise not to prolong the already protracted operation. Chromicized catgut was used to suture the ends of the tendons together, which were overlapped and held by passing the suture through each and twice before tying. The wound was then sewed up, dressed with dry antiseptic gauze, and the hand kept in a position of over-extension by a plaster of Paris dressing over all, so as to prevent dragging upon the re-united tendons. The temperature after the operation at no time rose to 102° , and after the first two days fell nearly to normal, and remained there. On December 6, two weeks after operation, the dressing was removed and the wound found nicely healed, except at one place, where there was a small quantity of pus. This pus was supposed to be due to the tuberculous character of the child's system, and not to failure in the antiseptic precautions used; although this was not certainly established. The wrist was washed with bichloride solution, and antiseptic gauze re-applied, and the forearm placed upon a straight splint. It was dressed again on December 14, and after that daily until all parts were thoroughly united. On December 21, the splint was discontinued, and after the swelling of the fingers had completely subsided, the patient was found to have very fair use of the fingers and hand. At the present time there is almost perfect return of extension to the wrist, and the hand has accordingly become a much more useful member. It is possible that at a future time an attempt may be made to find and unite the small thumb extensors. The case

well illustrates the importance of sewing all cut tendons at the time that incised wounds are presented for treatment. It is a common practice for physicians to be satisfied with simply suturing the cutaneous wound. This is a reprehensible practice, since it leaves the patient with a disabled member. All cut structures whether muscles, tendons, nerves or fasciæ, should be subject to immediate suture with buried catgut or silk sutures. The surgeon's duty is not done unless this is accomplished. Secondary suture as in the present case is valuable when primary suture has been neglected.

Operation for Club-Foot.

Katy F., a child eleven years old, was admitted to the Woman's Hospital, Nov. 13, 1889, for an operation for congenital club-foot on the left side. The child was said always to have been rather delicate, and at the time of admission, was still somewhat anemic, although otherwise in good condition. The deformity was of the variety talipes varus, and she walked, with great difficulty, upon the outer border and dorsum of the foot, where a large bursa had developed. Five years before admission, she had been an inmate of the Children's Hospital for operation on the same foot, and at that time several tendons, it is said, were cut and apparatus applied to correct the deformity, but without success. Her present age, eleven years, made Dr. Roberts decide, that anything short of a thoroughly radical operation would be useless, as, by this time, the bones of her foot had so far ossified, as to give no hope that they could be molded into proper shape by any apparatus, and his plan was, therefore, to remove such bones of the tarsus as prevented the foot from being brought into proper position. Tarsectomy was accordingly performed Nov. 15, 1889. The bones of the tarsus had been distorted until they formed a wedge, the outer ones being the broad end of the wedge, and those on the inner side of the foot forming the apex.

A large flap was cut upon the outer side of the foot, and the cuboid bone first removed, then the external cuneiform bone and the scaphoid, and, as the foot would still not come rightly into place, a projecting portion of the os calcis was also cut off with the bone nippers. There was considerable oozing, most of which seemed to come from the cut surface of the os calcis. The plantar fascia was then freely divided as well as

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the tendon of the tibialis anticus, and the foot forcibly bent into position. A drainage-tube was inserted, dry antiseptic dressings were applied, and over all a plaster of Paris bandage to keep the foot in position, until the parts had become firm, and the wound had healed. After the operation the child was very nervous, and her temperature ran up for a couple of days, reaching even so high as 105.2° ; but it soon came down to nearly normal, and remained there during the rest of her stay in the hospital. The oozing was so great also, that within the first twenty-four hours, all dressings had to be removed, because they were soaked through. The limb was washed with bichloride solution (1-1000), the drainage-tube removed, and fresh dressings applied and covered with a strong gypsum bandage to retain the foot in proper position. This dressing remained in place till December 20, a period of about five weeks, when it was again changed. At this time the wound was found to be healed except at one small point. It was now dressed daily with carbolized zinc ointment, and by December 26, was completely healed. All dressings were discontinued, and the Faradic current applied to the muscles of the leg for ten minutes twice daily; and massage of the foot and leg given for half an hour, as often. By degrees the patient began to walk, taking only a few steps at first, until by December 31, she had acquired good use of her limb. She now stands firmly upon the sole of her foot, which is shorter than the other because of the loss of the tarsal bones, and the long standing atrophy from disuse. She can walk very well, with only a slight limp. She needs simply a well-laced firm shoe, with, possibly, a steel rod at each side of the ankle-joint, to support the weak foot and ankle until the parts become more solid and stronger. Her gait will not have the elasticity of a child with perfectly normal feet; but the limp will be almost unnoticeable when she grows older and becomes accustomed to walking.

LEPER HOSPITALS IN INDIA.—It is stated that, to commemorate Prince Albert Victor's visit to India, Sir Dinshaw Petit has offered one lakh of rupees to build a Leper Home for Bombay, and the Nawab Junaghad has promised to build a Leper Asylum for the province of Kattywar. The permanent Memorial Fund for a Leper Asylum at Calcutta amounts to upwards of 45,000 rupees.

PERISCOPE.

Pneumothorax.

Mr. Walter A. E. Waller reports the following interesting case of pneumothorax in the *Lancet*, Feb. 8, 1890, in an apparently healthy young man without realized injury:

The patient, sixteen years old, had never been laid up, except for an attack of rheumatic fever nine months before. During this attack there was a mitral bruit, with very thumping action; but this all cleared up, and when examined for admission into a lodge of Foresters a month or so previously to his present illness he was found sound. On April 19, 1889, being in his usual health, he went out brook-jumping in thin shoes, but did not get wet, and had no fall. After this he had a cold in the head, but nothing more. On April 24 he began to ail, aching all over, etc., but walked a mile and a half, with a steep hill each way. On the following day pain and fulness in the epigastrium were experienced, with short breath; but he walked to work, though having to rest twice in going up the hill. On April 26 he got up and walked into Rugby, but was so ill when he reached his work that he was soon sent home in a cab. Next day Mr. Waller saw him at his house. He did not look ill, and talked of going to work again in two days. His temperature was normal. On examining the patient's chest, inspection showed deficient movement of the right side of the chest, and auscultation revealed insufficient respiratory sound on that side, though the breathing was nowhere inaudible. No tube sounds and no egophony were present, but there was a most peculiar and marked metallic echo over the front and back of the right side on coughing or speaking, and it did not seem that liquid was concerned in its production. Resonance all over the right chest was a little deficient, but fremitus was everywhere present. On the next day the patient was in bed, with a temperature of 101° , but there was no pain. Next day, however, he was unable to sleep from violent pain situated low down and in front of the right chest. Physical signs were much the same. No friction sound to account for pain. The right chest was now rather more resonant than the left. Movement and respiration were more deficient. The curious metallic echo was as marked as before, and could now be produced by deep inspiration, as well as by coughing and speaking. The tempera-

ture was 102°. The pain was much relieved by poultices and small doses of morphia. The tongue was thickly coated; there was some colorless, frothy and muco-purulent expectoration. On the 30th the temperature was 101.6°, pulse 120 at least (weak), and general restlessness was marked. The breathing was very embarrassed, face ruddy, and the ears were becoming blue in color. The right chest was fuller both above the clavicle and over the general surface; tongue was still thickly coated. The patient experienced great thirst.

A diagnosis of uncomplicated pneumothorax, probably of traumatic origin, was reached, and stimulant expectorants with opium and digitalis, brandy when necessary, were given. The day following the bowels were relieved after a good purge, and there was no alteration in the pulse. The patient slept two hours in the early part of the night. Chest signs much the same, with less expectoration. Mr. Waller made an exploratory puncture in the axillary line, but the needle soon got blocked, and was withdrawn. On May 2 the patient slept a little. Pain distinctly paroxysmal in character round the right nipple. He was still able to expectorate some sputum with effort; movement of the chest was freer, but it had the appearance of having air under the skin. He complained greatly of oppression over the epigastrium. Mr. Waller punctured the right chest with an ordinary hydrocele trocar; plenty of air was forced out, but no fluid. The patient passed a good night, and slept about five hours, and had no pain or dyspnea till the morning, when the metallic echo was not so distinct in the axilla, though much as before elsewhere. After this the patient's recovery was rapid and, although the physical signs did not entirely disappear, he was soon able to go to work again.

Olive Oil in the Treatment of Gall-Stones.

When, some years ago, some cases of successful evacuation of gall-stones in attacks of biliary colic following the ingestion of large quantities of olive oil were published, they were received with some incredulity, which passed into ridicule when it was found that the oil itself was evacuated in the form of saponified pellets. Nevertheless, the practice was not abandoned in some quarters, and from time to time further successes were

claimed for this singular form of medication. Recently Dr. Rosenberg has related three such cases, which are quoted in the *Lancet*, March 1, 1890. The first was a patient, thirty-six years old, who had suffered from gall-stone for several years and had been treated without result. The gall-bladder was enlarged. The patient during two weeks drank over a quart of olive oil, only vomiting once, and at the end of that period the liver and gall-bladder had notably diminished in volume. She had remained free from colic eighteen months after the treatment. The second case was that of a workingwoman, thirty-seven years old, who was attacked with biliary colic. There was slight icterus, which always increased at the menstrual periods. The liver reached for three fingers' breadths below the ribs. She was given seven fluid ounces of the oil mixed with a little menthol and the yolk of egg. Next day the pains had disappeared and the liver had diminished in size. The jaundice and pruritus persisted; so another similar dose was administered, when these signs also disappeared. For several days after she passed biliary calculi. The like result was obtained in a third patient, thirty-eight years old, who, after nine years' suffering from attacks of hepatic colic, had been unrelieved by many "cures" at Marienbad and Carlsbad, although on each occasion she had passed some small calculi. Rosenberg states that of twenty-one cases treated on this plan there were only two in which it failed. He found by experiment that large doses of olive oil increase considerably the flow of bile and diminish its consistency. And he mentions, on the authority of Cantani, that in Italy, where olive oil is taken largely as an article of diet, gall-stone is less frequent than in any other country. Lastly, Rosenberg would not advise recourse to this remedy until other methods had been tried and failed; but, as he truly says, it may well be prescribed before advising recourse to cholecystotomy.

The value of olive oil in the treatment has also been recognized by several physicians in the United States. In the *REPORTER*, Nov. 9, 1889, Dr. Thomas J. Mays reported three cases of gall-stone in which desertspoonful doses of olive oil, exhibited every three or four hours, completely relieved the hepatic colic and caused a rapid subsidence of the enlarged gall-bladder. In the *REPORTER* for March 1, 1890, a case reported by Dr. J. I. Kelly was quoted, in

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which two doses of olive oil, one of eight fluid ounces and one of six fluid ounces, given two hours after, caused the immediate relief of a most severe attack of gall-stone colic, and was followed by the passage of a handful of gall-stones the same day.

Hypnotism and the Law in Austria.

In October, 1889, the following law, relative to hypnotism, was promulgated in Austria:

"Whosoever, for the sake of the healing of disease, the prevention or mitigation of pain; or for the sake of instruction, experiment, demonstration or exhibition, shall use any method which is calculated to cause the loss of, or weaken, the consciousness of a human being, or which shall lessen the said human being's mental activity, shall be punishable with imprisonment, or a fine not exceeding 300 florins."

At that time the *Wiener Med. Presse*, in commenting upon the propriety of such a law, claimed that it could not be extended to the use of hypnotism by physicians without also including the use of other means capable of producing unconsciousness, or narcosis, such as morphine. The views of the Chief Sanitary Councilor (Oberster Sanitätsrath) agree with the above. In bringing the matter to the attention of the Department of Justice, he says, special enactments by which the study of hypnotic phenomena, or the use of hypnotism for therapeutic purposes would be restricted or made liable to punishment, are neither justifiable or necessary, because the study and therapeutic use of hypnotism by physicians could no more be denied them or restricted, than the use of narcotics or any other heroic remedies, such as poisonous drugs; and further, because misuse of the privilege of employing hypnotism, or neglect of proper precautions when it is employed, is not a specific offense, and is covered by the same penal statutes which apply to the offenses of physicians.

Antipyrin in Asthma.

Mr. Charles Smith reports, in the *London Medical Chronicle*, March, 1890, the case of a man, aged thirty-six, who had suffered from asthma for some years, the attacks commencing shortly after measles. The season of the year had no influence on the ailment, the paroxysms being as frequent in summer as in winter, but the time of taking food of

course had a marked influence on them. Treatment for the purpose of preventing the asthmatic attacks entirely failed, but nitrite of amyl at first seemed to shorten them. Usually they came on every month or six weeks.

In August, 1889, thirty grains of antipyrin were given at the commencement of a paroxysm. In ten minutes complete relief was obtained. Twenty-four hours after there was a slight recurrence of the attack, which antipyrin promptly subdued. From that time to January, 1890, there had been no recurrence of the attacks.

Psilosis, or Sprue.

Dr. C. Begg, in the *Lancet*, Feb. 8, 1890, in writing on the intestinal disorder variously named "psilosis" or "sprue," which is common in China, from his nine years' medical experience in that country, points out that there is little ground for believing the affection to be a specific disorder of the intestinal mucous membrane, as urged by some writers. He would rather regard it as a form of intractable diarrhoea from deranged intestinal digestion; and, in support of his contention, he points to the fact that the tongue remains clean and the appetite unimpaired. His main arguments are, however, derived from the result of treatment, for he finds in santonin a drug which acts as effectually in such cases as ipecacuanha does in dysentery. He was led to employ santonin from suspecting the presence of *ascaris lumbricoides* as a cause of the diarrhoeal symptoms; but, although in no case was this parasite met with, the drug had a remarkable effect in restoring a healthy state to the bowels. His view is, that "sprue" is due to the action of a microbic parasite upon the products of digestion, which, being altered and rendered unfit for absorption, act as irritants to the intestine and cause the intractable diarrhoea; and, in support of this view, he quotes Dr. Thin (who, however, regards the affection as due to a condition of the mucous membrane, which ultimately passes into atrophy), who describes several kinds of organisms in the fluid motions, notably a special form of bacillus. The value of santonin in other than cases of intestinal worms could not be better shown, a dose of five grains (for adults) once daily sufficing to cure the diarrhoea in a few days.

The sprue, as met with among the foreign

residents of China, is almost unknown in this country. There, however, it is greatly dreaded; many physicians claiming that nothing but an entire change of climate will effect a cure. Fatal cases occur frequently. The term "sprue" as defined by Dunglison, signifies "trush" and is usually applied to the common aphthæ of children. The name has been incorrectly applied to the disease in China for the reason that the latter frequently begins with symptoms of stomatitis.

Union of Tendons by Sutures.

At a recent meeting of the Surgical Society of Vienna, Dr. Schüssler showed five patients from Billroth's "Klinik" where section of the tendons had been successfully united by stitches. During the year thirty of these cases had been operated upon. In searching for the cut end of the tendon it is recommended that a longitudinal cut of the skin should be made in the direction of the tendon, so that the cicatrix of the skin may not become involved in the union of the tendon, as the movement of the limb may thus become impeded. In all these cases passive movement was commenced between the third and fourth week, although the perfect healing took months. Prof. Dittel remarked that the history of these operations was interesting, and not of recent origin. Heister, in the year 1750, wrote a small treatise on the union of tendons by sutures, in which he has described several methods. Prof. Billroth expressed his entire satisfaction with the happy results in these cases, which were principally due to the antiseptic treatment. Before antiseptics the wounding of tendons was a serious matter, as pyæmia or other blood poisoning was not uncommon. But even yet in favorable cases there always remains a thick, hard cicatrix which prevents the free movement of the muscle.—*Medical Press and Circular*, Feb. 12, 1890.

Study and Examinations in Germany.

In a recent lecture by Dr. A. W. Schüddekopf, on "Universities and University Life in Germany," he said that the German student is much less frequently examined than his English brother; but then what an ordeal when it comes! Unlike the English system there is little or no paper work, the candidate being examined *vivâ voce*, more importance being attached to the grasp he

shows of his subject and his manner of manipulating it, than to his knowledge of facts. Besides the *vivâ voce*, candidates have to write one or several "dissertations," which may take many months to prepare. Dr. Schüddekopf reminded his audience that, in Germany, University degrees are not considered to qualify candidates for masterships, for a license to practice medicine, and other offices, except in the case of candidates for a University professorship; but that candidates for such offices must have passed the "Staatsexamen," which in most cases is much more difficult than the degree examinations. Relating his own experiences in passing his "Staatsexamen," Dr. Schüddekopf caused a tremor to run through a sympathetic audience when he told that, after a year passed in writing "dissertations" on philological and philosophical subjects, he underwent nine hours *vivâ voce* examination in one day by eight German professors in as many different subjects! The majority of German students—except in the faculty of medicine—do not take a degree at all, but only pass their "Staatsexamen." It is the custom in Germany for a student to have been to several Universities before settling down at one for examination purposes—a system which the lecturer thought a very good one, on account of the facility it affords the student for becoming acquainted with the leading men in his subject.—*Science*, January 17, 1890.

Intestinal Concretions.

At a recent meeting of the Pathological Society of London, reported in the *Medical Press and Circular*, Feb. 12, 1890, Dr. Delepine read a paper on intestinal concretions, in which several cases of the affection were described, and the chemical structure of the enteroliths explained, these bodies being shown to consist of calcium salts aggregated round vegetable *débris* from ingested food. The retention of such substances through constipation or obstruction of the bowel afforded the opportunity for the deposit of the coating material upon them, and one case of an interesting nature was quoted, in which recto-vesical fistula was diagnosed from the presence of the outer coat of barley grains in the urine. In another instance, large quantities or concretions, due to olive oil taken for solution of gall-stones were found in the feces, and on examination proved to be made up of crystallized fat.

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THE MEDICAL AND SURGICAL REPORTER.

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CHARLES W. DULLES, M.D.,
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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

ADVANCE IN MEDICAL EDUCATION IN AMERICA.

A careful comparison of the Sixth Report of the Illinois State Board of Health on Medical Education, with the report for 1889, shows that there has been greater progress in the direction of a higher medical education during the period which has elapsed between these last two reports, than for any similar period in the history of the country; indeed, the progress has been greater than for half a decade. This is indicated by the increase of courses for instruction, like those instituted by the Johns Hopkins and Clark Universities, and by the fact that the number of colleges which require a graded course of lectures for three years, has increased twenty-five per cent.

Perhaps the most healthful sign that the people are awakening to the need of edu-

cated physicians is found in the passage of an act, in the State of New York, requiring a preliminary examination of students about to enter upon the study of medicine, by the Board of Regents of the University of that State. An attempt to repeal this law has been resisted by a popular outcry, which is the best possible evidence that an overwhelming public sentiment is behind the law. There has been an increase of six per cent. in the number of colleges requiring preliminary examinations, which is further proof that a popular sentiment exists favorable to raising the standard of general education for medical students, and the passage of medical practice acts by Florida, Tennessee and Oregon are evidences in the same direction.

Summarizing and comparing the tables in the Report, it will be seen that there are 139 colleges in existence, against 129 in 1886, and 131 in 1889: of these there are 126 in the United States and 13 in Canada at the present time. In the present report there are 149 institutions that are extinct, including 18 that were fraudulent.

In 1880 the number of colleges exacting certain educational requirements for matriculation was 45 (the Report we are quoting from says "1882" and "145," but these figures are typographical errors); in 1886, 114; in 1889, 117; in the present report, 124.

In 1882 the number of colleges requiring attendance on three or more courses of lectures was 22; in 1886, 41; in 1889, 47; in the present report, 64. In 1882, 42 colleges had chairs of hygiene, and 61 had chairs of medical jurisprudence; in 1886, 110 had chairs of hygiene, and the same number had chairs of medical jurisprudence; in 1889, 117 taught hygiene, and 112 medical jurisprudence; in 1890, 119 teach hygiene, and 114 medical jurisprudence.

The average duration of lecture terms in 1882 was 23.5 weeks; this rate gradually increased until in the present report it is 25.5 weeks, or an increase of two weeks.

The number of schools having terms of five months and more in the year 1882, was

101; in that of the present report is 121. The number having six months or more in 1882 was 42; in that of the present report (1889-90) it is 76.

There are now in the United States 22 licensing and examining bodies that do not give instruction. It is a matter of importance that the work of these examining boards should be as uniform as possible, in order to bring about the best results so far as medical education and the regulation of the practice of medicine are concerned. The difficulties incident to divided and limited jurisdictions would thus be overcome, and the work made broader and more national in its character. Unless this is done, owing to frequent changes of residence by medical men, repeated examinations become onerous, and in some cases work hardship. This is one of many good reasons for trying to secure co-operation and uniformity of action in issuing and recognizing certificates of examination by the various boards.

If this course is adopted, it will furnish facilities for the investigation of the character of applicants when removing to other States, as experience has taught that graduates having diplomas from some of the best medical colleges, or those who have passed a good examination, are frequently the greatest professional frauds and scoundrels. Knowledge of the history of these men, thus obtained, would assist in preventing their being licensed in other States, and would exercise a supervision over all which would do much towards upholding the *morale* of the profession.

There has been an increase since the last report of one college for women, there now being seven in the United States and two in Canada. The number of colleges for both sexes has increased by nine.

The total number of graduates in the United States in 1881-82 was 4,555; in the present report for sessions 1888-89 it was 4,337. The percentage of graduates to matriculates for the former period was 36.3; for the year 1888-89 it was 31.6.

The report gives a list containing names

of 27 colleges which require three courses of lectures and a year of study with a preceptor, while in the report for 1889 there were only four. It is altogether probable that Harvard University Medical School, the College of Physicians and Surgeons in New York City, University of Pennsylvania, Johns Hopkins University, University of Michigan, Chicago Medical College and St. Louis Medical College, will in a short time require four annual courses of lectures. There are twenty-two colleges which require, or will require three annual courses of lectures, as compared with thirteen announced in the report for 1889, of which two, the Kansas City Homœopathic Medical College and the Physio-Medical College of Indiana receded from their announcements.

The present indications are that three-fourths of the Medical Colleges of the United States will, within the coming year, voluntarily adopt the regulation of this Board, made July, 1887, requiring that after sessions of 1890-91, graduates shall have had four years of study and attended three annual courses of lectures. The remainder will be compelled to fall into line, or cease their existence.

The above is from Dr. Rauch's Report to the Illinois State Board of Health; and we quote it, not only as justifying the hopes and expectations which have often been expressed in the *REPORTER*, but as furnishing evidence of the debt of gratitude which the medical profession in the United States owes to this admirable and indefatigable laborer in the cause of reform.

SEWER CONSTRUCTION AT RANGOON.

We learn from an interesting paper in the *Engineering and Building Record*, March 15, 1890, that a new system of sewerage has been put in operation in Rangoon, the capital of British Burmah. Rangoon is a city having a population of 100,000 persons, and is a flat and low-lying city on the bank of

the Rangoon River, which in spring tides and floods rises to the level of many of the streets. Under such conditions the construction of large sewers through the loose silt and water-logged ground, with the building and operating of a pumping station to discharge the sewage into the Rangoon River, would have cost so much that a cheaper solution of the problem was sought in the Shone system. The work was designed and carried out by Shone & Ault, civil engineers, of London, in a manner described and illustrated in the paper referred to. The city is divided into twenty-two sections or districts. In each district the houses are connected with iron gravitation pipes six inches in diameter, which in turn are connected with a hydro-pneumatic ejector station, from which the sewage is forced into an iron sewage main and thence into the river near the town and at a level three feet below that of the lowest tide.

The power that expels the sewage from the ejectors is compressed air, which is produced at an air-compressing station, and is supplied to each ejector by a small cast-iron pipe connected with the automatic valve fixed on the top of the ejector. The sewage gravitates from the sewers through an inlet pipe into the ejector and gradually rises therein, until it reaches the under side of a bell at the top. The air at atmospheric pressure inside this bell is then inclosed, and the sewage continuing to rise outside and above the rim of the bell compresses the inclosed air sufficiently to lift the bell, spindle, etc., which opens the compressed air admission valve. The compressed air thus automatically admitted into the ejector presses on the surface of the sewage, driving the whole of the contents before it through a bell-mouthed opening at the bottom, and through an outlet pipe into the iron sewage rising main or high-level gravitating sewer, as the case may be. The sewage can escape from the ejector only by the outlet pipe; the instant the air pressure is admitted on to the surface of the fluid the valve in the inlet

pipe falls on its seat and prevents the fluid from escaping in that direction. The fluid passes out of the ejector until its level falls to a cup at the bottom of the ejector, and still continuing to lower, leaves the cup full until the weight of the liquid in the portion of cup thus exposed and unsupported by the surrounding liquid is sufficient to pull down the bell and spindle, thereby reversing the compressed air admission valve, which first cuts off the supply of compressed air to the ejector and then allows the air within the ejector to exhaust down to atmospheric pressure. The outlet valve then falls on its seat, retaining the liquid in the sewage rising main, and the sewage flows into the ejector through the inlet again, driving the free air before it through the air valve as the sewage rises, and so the action goes on as long as there is sewage to flow and compressed air is supplied.

This ingenious system includes, it will be seen, the use of the river as a place of deposit for the sewage. This is an objection to any modern sewerage system, and one which we trust will some day be done away with forever. But the system for Rangoon has the advantage that it could be adapted to any method for the utilization of sewage which might commend itself to the judgment of the government hereafter. It provides a system by which the sewage can be conveyed, in sealed pipes, from the various points of connection to the point of final discharge; and that point could be as easily a station for burning or utilizing the solid residue, as the river.

The system as described in the paper from which our facts have been taken, is well worth the study of sanitary engineers and of physicians interested in the study of sanitary questions.

ENTRANCE OF AIR INTO VEINS.

The *Bulletin Médical*, April 2, 1890, contains a report of a communication recently made by M. Cassaet to the Society of Anatomy and Physiology of Bordeaux, bearing upon the very important question of the re-

sults of the fact of entrance of air into the veins. It seems that M. Cassaet was doing a tracheotomy, without anæsthesia, upon a young man twenty-nine years old, with tuberculosis and stenosis of the larynx, who was suffocating. In the operation M. Cassaet cut a superficial large vein in the neck, which he had distinctly seen in the line of the incision a short time before. The opening of the vein was accompanied by a very distinct whistling sound, which seemed to indicate that air had been admitted to it. The vein was immediately caught and tied, and the operation was suspended. The patient gave no immediate evidence of having suffered any harm by the accident. On auscultating the heart, M. Cassaet discovered the following interesting points: Over an area covering about ten centimeters, the centre of which corresponded to the region of the tricuspid valve, there was heard a very distinct bubbling noise, of a metallic character, which was synchronous with the systole of the heart. This region seemed to extend, and at the same time the bubbles seemed to become gradually more numerous and larger. After a time the noise became more and more limited to the region of the tricuspid valve, and the bubbles diminished in volume, somewhat in the manner of the noise of a large râle, which by successive stages is converted into a subcrepitant râle. The bubbling sound disappeared after twenty-five minutes. In spite of the presence of this enormous quantity of air in the heart there was no serious disturbance of the pulse or respiration. The dyspnoea which had existed before the accident did not become any more intense. The pulse became gradually soft and compressible, but this improved as the bubbling sound disappeared. After a lapse of twenty-five minutes the patient for the first time presented some symptoms of asphyxia—cyanosis, chills, perspiration, and apnoea, which, however, ceased immediately upon the application of electricity.

The operation of tracheotomy was then

resumed and completed. Some hours later the patient desired to be raised up upon a chair, and the attendant had hardly done this when he suddenly died.

At the autopsy, in addition to the lesions of tuberculosis in the larynx, the trachea and the lungs, the heart was found to be distended by a clot, and the arteries and veins with black blood, which did not contain any bubbles of air. The divided vein was discovered at the level of the lower end of the incision.

It appears from this account that the patient inspired a quantity of air into his heart and that this did no immediate harm, although after a short time—twenty-five minutes—there were manifestations of depression and suppressed aëration of the blood, which may have been due to the passage of the bubbles into the lungs, and their very general dispersion through them. It is possible also that in this way the blood became freed from the air, although it is hard to understand how this could have made the circuit of the circulation without producing any manifestations until it arrived in a very finely divided condition—as it must have done—in the lungs; and that there, when so finely divided, it should have produced cyanosis. In fact it is very hard, without very careful reflection, to draw any precise conclusions from the report of this case. None the less it is an extremely interesting one, and deserves to be placed on record as a contribution to the study of the subject of the entrance of air into the veins. Those who are familiar with the records of the subject, and who have had some experience in analyzing reports of cases in which it is supposed that air has found entrance to the veins of man, may be able to eliminate from this account the elements of error or uncertainty in its details, and to deduce from its more certain points some useful lessons of theory or practice in regard to a subject which has lately attracted considerable attention, and which is at all times one of great importance.

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THE CURSE OF STREET MUSICIANS.

The Medical Profession has an immediate interest in everything which concerns the health and comfort of the community, and is sensitive to many sources of injury to health which sometimes seem rather trivial to those less familiar with sickness. One such source of injury is the distress and nerve strain caused by street noises. There are in every city thousands of persons, day and night, who lie on beds of suffering, of weakness, or of weariness, longing for sleep, and finding its approaches scared away by sounds from the streets. Some of these sounds are unfortunately unavoidable. But the more of these there are, the more is it important that those which may be prevented should be removed from the list of afflictions of city life.

Just now we invite the attention of the readers of the MEDICAL AND SURGICAL REPORTER to the injury inflicted by strolling musicians in all cities. Of late years these have multiplied to such an extent that scarcely any season of the year, or any time of day, or any part of a large town is wholly free from the blaring strains of brass instruments or the horrible confusion of the modern hand-organ.

The experience of every physician must have furnished him with illustrations of the damage these noises do to the sick: the children waked from the sleep which their poor little frames needed; the old people, robbed of their short respites from wakefulness; the brain-weary, cheated of their release from care and thought; the nervous, irritated and exasperated almost to madness—in fact, every physician must look upon strolling musicians as a source of most serious injury to health as well as to comfort. For this reason the physicians of Philadelphia will be glad to know that an attempt is being made to curtail the extent of the harm done by them in this city. An ordinance will be considered in the City Councils next week, which gives to householders the right to require any street musician to

"move on," if disturbing him or his family, and we hope it will pass. We have only one thing to suggest in regard to it, and that is that it might be amended so as to give to every person whatsoever the right to require street musicians to depart, and not to householders only.

Those of the readers of the REPORTER as have opportunity will do their fellow-man a service if they will use their influence to have them delivered from the source of distress and suffering which is to many a veritable curse.

STATISTICS OF PASTEUR'S TREATMENT OF HYDROPHOBIA.

The *Journal de Médecine*, March 30, 1890, contains a list of persons who have died after receiving the so-called "preventive treatment" at the hands of Pasteur and his assistants in Paris, giving in each instance the name of the individual and other details. The whole list includes ninety cases. The editor, referring to it, calls attention to the great contrast between the claims of Pasteur and his followers that the method is a humane and useful one, and the fact that since it has been practiced there has been an actual increase in the number of deaths from hydrophobia in France; and he might have made the case appear much more impressive by adding to the list of deaths the vast number which it is claimed would have succumbed to hydrophobia if they had not been treated by Pasteur. The total is a number which would be incredible to any calm and critical investigator familiar with the history of hydrophobia in France and elsewhere; and it is astonishing to see how unrecognized this fact is in general, and how unreservedly the statistical juggling of Pasteur and his followers is accepted by many medical men.

PARACRESOTINIC ACID. — Paracresotinic acid is the latest addition to the interminable list of antipyretics. From 2 to 3 drachms of the sodium salt have been given within the space of 24 hours.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

MANUAL OF SKIN DISEASES, WITH SPECIAL REFERENCE TO DIAGNOSIS AND TREATMENT, FOR THE USE OF STUDENTS AND GENERAL PRACTITIONERS. By W. A. HARDAWAY, M. D., Professor of Skin Diseases in the Missouri Medical College and in the St. Louis Post-Graduate School of Medicine. Square 8vo, pp. viii, 434. St. Louis: Theo. F. Lange, 1890. Price, \$3.00.

The present book is an outgrowth of Dr. Hardaway's lectures on dermatology. While it has developed into a much larger book than the author had originally planned, he states in the preface that he has endeavored to keep it within moderate compass, and to make it a trustworthy guide, especially in diagnosis and treatment. The first part of the book consists of a general introduction to the study of skin diseases, the second of an alphabetical arrangement of diseases for ready reference; and the third of an appendix containing additional formulæ and a diet table.

The style of the author is pleasing; it is terse, direct and clear. We have examined a number of the sections and are glad to say that the directions for treatment are very good, and as a rule not too difficult for a student and general practitioner to comprehend and execute. The author states his own opinions distinctly but modestly, and at the same time does full justice to the opinions of well-known authorities in this department of medicine. We can cordially commend the book to our readers.

THE DISEASES OF CHILDREN, MEDICAL AND SURGICAL. By HENRY ASHBY, M. D., Lond., Physician to the General Hospital for Sick Children, and G. A. WRIGHT, B. A., M. B., Oxon., Asst. Surgeon to the Manchester Royal Infirmary, and Surgeon to the Children's Hospital. 8vo, pp. xix, 681. London: Longmans, Green & Co., 1889. Price, \$6.00.

It gives us great pleasure to recommend this book to the readers of the REPORTER. It is a thoroughly good book in both matter and manner, comprehensive, concise, and thoroughly readable. Dr. Ashby has written of the Medical Diseases of Children, and Mr. Wright of the Surgical Diseases of Children. Each has done his work well, and it can be said that the practitioner will find an ample description of almost every diseased condition to which children are subject, together with sound advice concerning its management.

The publishers have issued the book in good style. The paper, printing and illustrations are all good. The use of block-letter headlines has added to its usefulness as a work of reference.

NEW REMEDIES AND APPLIANCES.

In this department, notice will be given of Remedies, Food Articles, and Instruments or Surgical Appliances of which specimens are sent to the Editor; it will bear the same relation to these articles that the department of Book Reviews now does to books.

Fairchild's Pepsin.

Fairchild's pepsin has become so well and widely known that it has little need of special commendation. A specimen just sent

us is handsome, and we have little doubt has the strength and purity claimed for it. Years of experience with the preparation of pepsin and pancreatin sent out by Messrs. Fairchild Bros. & Foster have led us to a confidence in them which it is a pleasure to express.

NOTES AND COMMENTS.

Treatment of Peritonitis.

In a paper read at the recent meeting of the Alabama Medical Association, Dr. W. E. B. Davis, of Birmingham, Ala., said that, from a study of the experiments of Pawlowsky, Grawitz, Wegner and others, he thinks the following points pretty well settled:

First. Simple peritonitis, when caused by a sufficient quantity of a chemical irritant, will produce death by the extent of the inflammation.

Second. Simple inflammation may terminate in septic peritonitis, by producing a weakened condition of the walls of the intestines, which permit the passage of septic germs from the intestinal canal into the peritoneal cavity.

Third. While pathological germs in a small quantity may be absorbed by the healthy peritoneum, without producing a peritonitis, the same quantity combined with a chemical irritant may produce a violent inflammation—the irritant having prevented the absorption of the germs and caused the exudation of a nutrient fluid for their multiplication.

Fourth. Large quantities of septic fluids and microbes always produce suppurative peritonitis; yet, a small quantity of either may be absorbed and destroyed, unless the peritoneum has been weakened by antecedent pathological changes.

Fifth. A septic fluid may gravitate into dependent parts of the peritoneum, and become shut up, either by plastic inflammation, or by a coil of intestine, and thus be prevented from producing diffuse peritonitis, but after a time this may rupture and produce death from general peritonitis.

Sixth. The germs of septic peritonitis will be found in the kidneys and other organs of the body, and in greater quantities, according to the extent and duration of the inflammation.

Seventh. The condition of the peritoneum and the nature and quantity of the

septic product will determine the rapidity of the inflammation, which usually ends in from 48 hours to 6 days, but death may be produced from shock in a few hours. Tubercular inflammation is always slow in its progress.

From a consideration of the foregoing principles, he says the following indications for treatment must be arrived at:

1. Promote absorption of the inflammatory products of simple peritonitis as rapidly as possible, and thus relieve the inflammation and prevent the possibility of septic peritonitis.

2. In the early stage of peritonitis, whether simple or septic, where the cause cannot be determined, hasten the absorption of inflammatory products, etc., with purgatives.

3. When medical treatment fails to give relief, septic fluids should be removed by operative procedure.

4. In localized peritonitis—with circumscribed pus formation—the pus should be removed and the abscess cavity drained.

5. In acute septic peritonitis, operative procedure must be adopted early or there will be no chance of recovery offered by the operation, as the inflammation will become more extensive the longer it continues, and, too, there will be so great a quantity of septic germs absorbed into the system, that death will result from toxemia, even though the local inflammation should be remedied by a late operation.

He quoted from Habershon and others, and states that it has been demonstrated, that in the large majority of cases, that peritonitis is a symptom of some well-recognized lesion of the abdominal or pelvic viscera, and that the only rational treatment must be based upon this conception of the disease. Peritonitis is not a "disease distinct," as taught by Bichat, and upon which teaching the treatment of Alonzo Clark gained such great popularity. The "opium splint" is irrational, for it not only locks up the products of inflammation, but as shown by Wylie, Johnson, Baldy and others, and by his own experience, subjects the patient to one of the greatest dangers of the disease, viz.: obstruction of the bowels from adhesions.

In the case of perforation of the bowel, opium is indicated to relieve pain and shock, and to prevent peristalsis, and further escape of the intestinal contents into the peritoneal cavity. Again, morphine hypodermically may be used, with benefit, in

some cases when there is persistent and uncontrollable vomiting; but at the same time, calomel in small and frequently repeated doses, may be dropped on the tongue and the bowels induced to act. There are many cases in which it is absolutely necessary to give a hypodermic injection for pain, but this should never be given in such doses as recommended by the advocates of the opium treatment, and should not be administered at all unless the patient's condition is being made more grave by the shock provoked from pain.

The first two indications for treatment are best met by free purgation, as taught by Tait and others, and the majority of those who have adopted this plan select the magnesium salts, as they produce very large watery stools. When the stomach rejects salts, calomel may be used.

He refers to a large number of cases treated by him in the most satisfactory manner by purgation—and among them several cases of threatened peritonitis, after laparotomies. During the past year he has not waited for symptoms of peritonitis after a laparotomy, but begins the use of small doses of salts, and if not retained, of small doses of calomel, a few hours after the patient gets from under the influence of the anæsthetic, and aids the purgative by the administration of enemata of milk and whiskey every third hour, which relieve thirst, and stimulate and nourish the patient, if retained.

In these cases he has had to give an occasional hypodermic of morphine, but this did not prevent the bowels acting. He has had to depend on calomel oftener than salts, as it was not rejected. He reports cases illustrating how purgative treatment aids in diagnosis, and others to show how all symptoms may be masked by opium, and an operation delayed too long—and concludes by stating that it is very important not to resort to the free use of morphine, unless an operation has already been decided on, and this administered to relieve pain and lessen shock.

Abdominal Surgery in Cuba.

According to Dr. Barrena, the results of abdominal surgery, as practiced by himself and some of the other leading surgeons in Cuba, have hardly been as satisfactory as could be desired. Of 39 cases of ovariectomy, 12 were fatal. Of 11 cases of hysterectomy

no less than 9 were fatal; 3 cases of miomectomy, 3 of salpingotomy, and 1 of ligature of the tubes, were all successful, but 4 cases of exploratory incision proved fatal to 3 of the patients, and the only case of vaginal hysterectomy was also fatal. Altogether, out of 62 persons operated on, no less than 25 died. It is to be hoped that this courageous statement of actual facts may tend to deter surgeons, who might otherwise be induced by the brilliant results of abdominal operations frequently published, from entering with too light a heart upon operations of this nature. The unfavorable results referred to may, perhaps, be partially explained by the insanitary condition of Havana, and probably of other Cuban cities. This subject was also treated during the Congress by Dr. Wilson, who pointed out that the bad water and want of a proper system of sewerage, together, doubtless, with the heat and moisture of the climate, raised the death-rate of Havana to a figure about double that which denotes the death-rate of London.—*Lancet*, April 5, 1890.

Tuberculosis in Cattle.

In the *Allgemeine Medicin Central-Zeitung*, April 16, 1890, there is a communication of Prof. Eggeling to the Farmers' Club in regard to tuberculosis in domestic animals and especially in cattle. Eggeling, in this, discusses particularly the etiological relations of tuberculosis, and says that heredity plays a very small part in this disease in cattle, and he thinks it is more dependent upon infection from breathing in or eating infectious matter. The course of tuberculosis in cattle is a relatively tedious one, so that half a year may pass by before a cow which has been infected by a tuberculous neighbor will show the first signs of the disease. It advances more rapidly in young cattle; and calves which have ingested tuberculous milk succumb very rapidly: probably because their immature organs have less power of resistance to the invasion of the tubercle bacillus. The diagnosis of the disease thus is exceedingly difficult in the early stages, and its cure is by no means easy. Therefore it is desirable that diseased cattle should be destroyed as the only safe means to a thorough cleansing and disinfection of the place. In regard to the possibility of the communication of tuberculosis to human beings by ingestion of the milk of tuberculous ani-

mals, Eggeling recommends that only such milk shall be used as has been collected from a large number of animals in a herd, so that by the mingling of healthy milk with that of diseased animals the proportion of infectious matter shall be reduced.

Teeth in Ovarian Cysts.

The subject of minute examination of the teeth found in ovarian dermoid cysts has not, in the opinion of Mr. Bland Sutton, received attention commensurate with its scientific interest. The age at which these teeth develop is uncertain: for instance, cases have occurred where ovarian cysts in children maintain fully formed teeth; whereas in adults they may be found only in a very early stage of development. Nor is there any certainty as to the time of eruption or shedding of these teeth, being in this respect unlike hair, which becomes gray and falls out concomitantly with the hair of the head. The number of teeth in ovarian cysts varies considerably, two to four being common, but it may reach three to four hundred. Owen, Salter, Coleman and Tomes mention ovarian teeth, but give only meagre descriptions of them. Ovarian teeth have enamel and dentine, the enamel being generally irregular, with deep fissures and pits. They may be like normal buccal teeth surrounded by a bony alveolus, and possess an alveolar-dental periosteum, and this resemblance to the upper or lower jaw has given rise to the erroneous idea that dermoid cysts are included fetuses. In shape these teeth may be divided into three groups—multi-cuspidate, bi-cuspidate and canineiform. As a general rule the crown and fang are in inverse proportions as to size, and multiple fangs are very exceptional. The cementum varies considerably; sometimes there is only a thin layer on one side of the fang; in other cases it is absent altogether. Salter described nerves as being distributed to ovarian teeth, but this has not been confirmed. In one especially suggestive case, where two ovarian cysts were present, Mr. Bland Sutton found in one tissue indistinguishable from brain matter, and in the other teeth, in which, however, he was unable to demonstrate satisfactorily the presence of nerves. The microscopical specimens exhibited of developing ovarian teeth showed that the type follows that of normal buccal teeth, there being a papilla and a

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dipping down of epithelium to form the enamel organ. The theory that caries ever takes place in ovarian teeth is altogether unsound, and is due to the deceptive appearance of the enamel, which is often of worm-eaten character, the ravines and pits filled with fibrous tissue, which in macerated specimens leaves a cavity much resembling caries; in other cases, moreover, the pulps may absolutely penetrate the enamel. Mr. Charters White supplemented the paper with a description of the irregular arrangement of the enamel and dentine in these teeth as shown under the microscope. — *Lancet*, March 8, 1890.

An Improved Bandage Roller.

For over a year past a new bandage roller, devised by Mr. John Borham, one of the attendants, has been in use at Bellevue Hospital and several other public institutions.



This presents some features which make it preferable to any other bandage roller we are acquainted with.



The apparatus will be readily understood by examining the illustrations. A piece of bandage muslin, of a width somewhat narrower than the inside space of the roller, is

passed behind the metallic bar in front of the bottom board, then over the three wooden rectangular bars which at the same time secure the two side frames together, and having been adjusted by its edge to the square steel axle the latter is turned by means of a winch, thus winding the muslin tightly and smoothly upon the axle in any thickness compatible with the distance of the nearest bars. It will, of course, be readily understood that during the passage of the strip of muslin over the several sharp-edged wooden bars, every crease and unevenness is removed from it, so that the final roll produced upon the axle is perfectly homogeneous. The axle itself is slightly tapering from the winch towards the other end, and when the roll has arrived at the proper thickness, and the muslin has been cut, it is simply pulled out. The roll may then be cut with a sharp, flat-bladed knife into bandages of any desired width. — *American Druggist*, April, 1890.

Phthisis Treated with Calomel.

Dr. Dochmann, in the *Deutsche Med. Wochenschrift*, Feb. 13, 1890, recommends calomel in the following formula, in the treatment of incipient phthisis:

R Hydrag. chlorid. mitis gr. x
Pepsini gr. lvi
Tinct. opii gtt. xxx
Extr. phellandrii q. s.
Fiant pillulæ nos. lx.

The above formula will be found especially useful. The gastric complications are marked. In hemoptesis the opium may be replaced by ergot; and, if the cough is severe, extract of hyoscyamus may be substituted.

Parasitic Fetus.

The *Lancet*, February 22, 1890, says that one of those singular malformations described as "parasitic fetus" has been attracting some attention at Demerara. A coolie was admitted into the Colonial Hospital suffering from a tumor in the right loin. The man died, and at the *post-mortem* examination the tumor proved to be possessed of a cranium, with hair attached, an imperfect nose and mouth, no hands or feet, but the rudiments of male genitals. The subject of this "autosite" was thirty-two years old.

NEWS.

—The Massachusetts State Board of Lunacy and Charities has formally ordered the return to Europe of a leprous Swedish woman, who arrived in Boston on April 28.

—Supervising Surgeon-General Hamilton, of the Marine Hospital Service, reports that the new fumigating steamer is now in service at the United States Quarantine Station at the Delaware Breakwater.

—The annual meeting of the Medical Society of New Jersey will be held in the Heath House, Schooley's Mountain, on Tuesday, June 10, 1890, at 4 P. M., and will continue in session the following day.

—Dr. John H. Douglas, General Grant's physician at the time of his death, is lying ill at the Presbyterian Hospital, New York. He is stricken with paralysis, and, moreover, is understood to be in reduced circumstances.

—Dr. Samuel Rush Haven, of Chicago, died suddenly in Joliet, Illinois, on Monday of paralysis. He went out with the first troops as a brigade surgeon under General Grant. He was a native of New York State, having been born in Sheridan, Chautauqua county, in 1827.

—The latest improvement at the Biological School of the University of Pennsylvania is a tank for water plants which is to have a surface of 1,000 square feet. Special facilities for the cultivation of these plants are rare in the United States and this undertaking of the University is therefore particularly interesting.

—Dr. Jennie McCowen has been re-elected President of the Davenport (Ia.) Academy of Natural Sciences by unanimous vote. Dr. McCowen was one of the earliest women members of the New York Medico-Legal Society. She was last year elected one of the Vice-Presidents of the International Medico-Legal Congress.

—The Chenango County Poorhouse and Insane Asylum, located at Preston, a few miles west of Utica, N. Y., was entirely consumed May 7. There were no provisions for extinguishing the flames. The keepers and neighbors gave their attention to getting out the 125 paupers and insane and let the building burn. These were all rescued, but 11 idiots are missing.

—The Longue Pointe Lunatic Asylum, ten miles from Montreal, Canada, was destroyed by fire May 6, and about 50 of the inmates are believed to have perished in the flames. The asylum was under the charge of the Sisters of Providence, and several of the

sisters lost their lives in trying to save the patients. The asylum was founded in 1873, and the amount spent in organizing the institution was \$1,132,232, of which the buildings cost \$700,000.

—Delegates from the leading Societies and Colleges of Pharmacy in the United States met in convention in Washington, D. C., May 8. The work of the convention is confined to making a general revision of the pharmacopœia and of collection of formulæ used by physicians in their prescriptions. Officers were elected as follows, to serve for ten years: President, Dr. Horatio C. Wood; Vice-Presidents, Drs. W. S. Thompson, D. W. Prentiss, J. M. Flint, A. E. Ebert, and J. W. M. Searcy, of San Francisco; Secretaries, Dr. H. A. Hare and Dr. G. H. C. Klie.

—On May 7 the Memorial Pavilion (children's ward) at St. Luke's Hospital, Bethlehem, Pa., erected to the memory of the son of Mr. and Mrs. E. P. Wilbur, was formally presented to the hospital by them. Dr. Lamberton, President of the Lehigh University, presented the ward to the hospital in the name of the donors, and Dr. William G. Cattell, of Philadelphia, First Vice-President of the Board of Trustees, received the gift for the hospital. The ward is a building of handsome and modern construction, and contains twelve cots and five bedrooms. The ward cost \$40,000.

—Over one million dollars is divided among public and charitable institutions of Philadelphia by the late George S. Pepper, according to the terms of his will. Among the endowments most interesting to the profession are the following: University of Pennsylvania, \$60,000 for the endowment of a professorship, to be selected by William Pepper, M. D.; Hospital of the University of Pennsylvania, \$50,000; Presbyterian Hospital, \$50,000; Hospital of the Protestant Episcopal Church, \$50,000; Orthopaedic Hospital, \$25,000; Pennsylvania Hospital, \$50,000; Hospital of the Jefferson Medical University, \$50,000; Charity Hospital, \$25,000; St. Joseph's Hospital, \$25,000; Children's Hospital, \$25,000; Wills Hospital, \$10,000; St. Christopher's Hospital for Children, \$25,000; Hospital and Dispensary of St. Clement's Church, \$10,000; Children's Hospital, Country Branch, \$10,000; Maternity Hospital, \$25,000; Northern Dispensary, Southern Dispensary, Philadelphia Dispensary, Howard Dispensary, each \$5,000.

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